

What is claimed is:

1. A bunion correction device comprising:

means for attaching at least one electrode to the foot for applying an electrical signal to the abductor digiti minimi brevis muscle in the foot for strengthening the abductor digiti minimi brevis muscle to counter balance the strength of the foot flexor digitorum muscle to correct a bunion in the small toe; and signal generator means for generating the electrical signal and applying the generated signal to the at least one electrode.

2. The device of claim 1 wherein the means for attaching comprises strap means for encircling the foot and means for securing the at least one electrode to the strap means for abutting the foot when the strap means is attached to the foot.

3. The device of claim 1 wherein the generating means includes means for applying a generated signal to two electrodes.

4. The device of claim 1 wherein the signal generator includes means for generating a plurality of pulses and includes means for setting the pulses in the range of 0-80 mA peak with either a positive or negative pulse into a 500 ohm load.

5. The device of claim 4 wherein the means for generating includes means for generating the pulse at a frequency in the range of about 2Hz to 150Hz.

6. The device of claim 4 wherein the means for generating includes means for generating the pulse with a width in the range of about 60:s to 250:s.

7. The device of claim 4 wherein the means for generating includes means for generating bursts of said pulses of about 7 pulses at a maximum pulse rate.

10 8. The device of claim 4 wherein the means for generating includes means for generating bursts of pulses twice a second.

9. The device of claim 2 wherein the strap means comprises a strap for encircling the foot.

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10. The device of claim 2 including two spaced electrodes arranged on the strap means for overlying the abductor digiti minimi brevis muscle of the foot in two spaced locations.

20 11. The device of claim 3 wherein the means for generating includes means for

independently generating the two signals and applying a different signal to each electrode.

12. A method of correcting a bunion condition in a foot comprising the step of
5 applying an electrical signal to the abductor digiti minimi brevis muscle to strengthen
the abductor digiti minimi brevis muscle and counter balance the strength of the
flexor digitorum muscle to correct for an imbalance between the two muscles.

13. The method of claim 12 including the step of applying repetitive cycles of
10 electrical pulses to the abductor muscle.

14. The method of claim 13 including the step of generating pulses that are
modified square waves at a pulse repetition rate of 2Hz to 150 Hz and at a pulse
width of about 60:s to 250:s.

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15. The method of claim 14 including the step of cyclically increasing the pulse
width.

16. The method of claim 15 including the step of varying the pulse width in
20 repetitive four second cycles.

17. The method of claim 12 including the step of wrapping the foot with a corresponding strap, attaching at least one electrode to the strap with the electrode abutting the foot and then applying the electrical signal to the electrode.

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18. The method of claim 12 including optimizing the signal to maximize said correction by adjusting the signal parameters until an optimum signal is generated.

19. The method of claim 12 including periodically applying the signal to the foot.

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20. The method of claim 19 including applying the signal in the range of 15-30 minutes daily.

21. The method of claim 12 including cyclically tightening and relaxing the abductor
15 digiti minimi brevis muscle with the electrical signal in repetitive periods.